

CLAIMS

SUB A1
1. A ceramic heater comprising a ceramic substrate and
a heating element disposed either on the surface or internally
5 of the substrate,

wherein the work-heating surface has a JIS B 0601 surface
roughness of $R_{max} = 0.05$ to $200 \mu\text{m}$.

2. A ceramic heater comprising a ceramic substrate and
10 a heating element disposed either on the surface or internally
of the substrate,

wherein said ceramic substrate contains an element other
than its dominant constituent elements and the work-heating
surface of the heater has a JIS B 0601 surface roughness of R_{max}
15 = 0.2 to $200 \mu\text{m}$.

SUB A1
3. The ceramic heater according to Claim 1 or 2
wherein said ceramic substrate is at least one member
selected from among a nitride ceramic, a carbide ceramic and
20 an oxide ceramic.

4. A ceramic heater comprising a nitride ceramic
substrate and a heating element either on the surface or
internally of said substrate,

25 wherein said nitride ceramic substrate contains an
element other than its principal constituent elements and the
work-heating surface of the heater has a JIS B 0601 surface
roughness of $R_{max} = 0.2$ to $200 \mu\text{m}$.

30 5. A ceramic heater comprising a nitride ceramic
substrate and a heating element either on the surface or
internally of said substrate

wherein said nitride ceramic board contains at least one
element selected from Na, B, Y, Li, Rb and Ca and a work-heating
35 surface has a JIS B 0601 roughness value of $R_{max} = 0.2$ to 200

μm .
SUB
A2

6. The ceramic heater according to Claim 4 or 5
wherein said nitride ceramic board has the form of a disk
5 having a diameter of more than 150 mm.

AB3

7. The ceramic heater according to Claim 4, 5 or 6
wherein the content of at least one element selected from
the group consisting of Y, Li, Rb and Ca is not less than 0.1
10 weight %.

8. The ceramic heater according to Claim 4, 5 or 6
wherein the content of at least one element selected from
the group consisting of Na and B is not less than 0.05 ppm.

15

ADD
A3

Add B